propriate (eg, those with a history of reproductive cancer or demonstrated intolerance to HRT), and no publicly subsidised therapeutic options are available in Australia for such women. The aim of this study was to assess the cost-effectiveness of raloxifene in preventing osteoporotic fractures when HRT is inappropriate. **METHODS:** A Markov model was developed to compare raloxifene with no drug therapy in patients who are unable to use HRT. Separate analyses were performed for those who are intolerant of HRT and those unsuitable for HRT due to a history of reproductive cancer (with a consequent greater baseline risk of breast cancer). Relative efficacy assumptions in the model were taken from randomised controlled trials and the published literature. Primary outcomes included vertebral fractures, non-vertebral fractures and breast cancer in a cohort with a low bone mineral density and an average age of 65 years. The model ran for a period of 30 years, contained nine discrete states and produced cost per quality-adjusted life-year (QALY) values. Limited memory was incorporated into the model by separating each fracture health state into two states, representing a first year and then subsequent years after fracture. **RESULTS:** The incremental cost per QALY gained with raloxifene compared with no therapy was $33,539 in those who are intolerant of HRT and $29,780 per QALY in patients with a history of reproductive cancer. Extensive sensitivity analyses indicated the results remained robust. **CONCLUSIONS:** Raloxifene is a cost-effective therapy to reduce fracture risk in postmenopausal women unsuitable for HRT.

OD2

LONG-ACTING RISPERIDONE IN SCHIZOPHRENIC PATIENTS COMPARED WITH ORAL OLANZAPINE AND HALOPERIDOL DECANOATE: A COST-EFFECTIVENESS ANALYSIS

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Continuity is a key treatment success factor to reduce relapse and hospitalisation rates of schizophrenic patients. Atypical antipsychotics with daily oral administration are associated with improved efficacy, tolerability and compliance compared with older, conventional neuroleptics. Similarly, conventional depots have shown to reduce the risk of relapse over oral conventional. The novel long-acting risperidone, administered intramuscularly once every two weeks, is the first long-acting formulation of an atypical antipsychotic. **OBJECTIVES:** To assess the cost-effectiveness of long-acting risperidone versus oral olanzapine and haloperidol decanoate in recently diagnosed schizophrenic patients. **METHODS:** A cost-effectiveness analysis is considered. Main assumption is that compliance improvement, thanks to a long-acting formulation leads to an increased efficacy. A decision tree model was built with a time horizon of 2 years. A French payers perspective was adopted. Outcome probabilities and cost estimates were based on published data, and supplemented with expert opinion. Only direct medical costs were considered. Effectiveness measures were relapse-free patients and patients maintained on the same treatment for 2 years. **RESULTS:** 76.30% of the patients receiving long-acting risperidone remained relapse-free, compared with 69.60% with olanzapine and 47.70% with haloperidol decanoate. Of the patients treated with long-acting risperidone, 82.7% remained successfully on treatment for 2 years, compared with 74.80% and 57.30% for patients treated with olanzapine and haloperidol decanoate respectively. Total direct cost per patient over 2 years were €13,168 with risperidone, €13,280 with olanzapine, and €16,910 with haloperidol decanoate. Long-acting risperidone was the dominant strategy in each case and remained dominant strategy in sensitivity analyses. **CONCLUSION:** The model indicates that treatment with long-acting risperidone reduces relapses, improves continuity of treatment, and is associated with decreased total direct medical costs over two years, when compared with oral olanzapine and haloperidol decanoate.

OD3

STOCHASTIC COST-EFFECTIVENESS ANALYSIS OF CHRONIC VENOUS LEG ULCERS—THE CASE OF PROMOGRAN® IN A SWEDISH HEALTH CARE SETTING

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OBJECTIVE: To develop a health economic model for estimating long-term costs and effects of treating chronic venous leg ulcers (VLU) in Sweden on the basis of a randomised clinical trial (RCT) (UK-97-0005 Device + Adaptic(R) (N:37) vs. Adaptic(R) only (N:36) under Biflex(R) compression bandage). **METHOD:** Patient data from a Swedish study including 252 VLU-patients recruited from a specialised leg ulcer clinic in Malmö between 1993 and 1997, is used in a Monte Carlo simulation model to estimate individual ulcers' time-to-healing (TTH) with conventional treatment. In accordance with patient data for 80 patients matching the inclusion criteria in the UK-97-0005 Device RCT, we impose a lognormal distribution on the TTH. The effect of UK-97-0005 Device is modeled as the relative efficacy of UK-97-0005 Device versus placebo seen in the clinical trial at the end of the 12 weeks study period (15%, $p > 0.05$). Costs are evaluated from a health care provider perspective (mate-

rials, labour and surgical procedures) and are dependent on TTH. **RESULTS:** After 18,000 iterations the average TTH (cost) fell from 25.9 (€2136) to 22.0 weeks (€1987) for small ulcers (<10 cm^2) and from 39.0 (€7047) to 33.0 weeks (€6362) for large ulcers (>=10 cm^2) when UK-97-0005 Device was added. Corresponding coefficients of variation ranged between 99% and 125% for TTH and 86% and 120% for costs. The main cost driver was labour costs (75% and 84% for small and large ulcers, respectively). The remaining costs were split equally on materials and surgical procedures. Break-even was reached at a relative efficacy of UK-97-0005 Device of 7%. On the basis of an average prevalence of VLU of 0.2% in Sweden, the total cost of treating VLU-patients with UK-97-0005 Device was estimated to €59.7 million. **CONCLUSION:** At a relative efficacy above 7%, UK-97-0005 Device was shown to be a dominant alternative compared to conventional treatment of VLU in Sweden.

INPATIENT—RELATED STUDIES

HS1

COST-EFFECTIVENESS AND BUDGET IMPACT OF THE SIROLIMUS-ELUTING STENT IN THE STENT ERA

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OBJECTIVES: Sirolimus-eluting coronary stents (SES) are able to strikingly reduce instent restenoses as compared with conventional bare metal stents (BMS) and entered the European market in April 2002. We thus aimed at estimating SES expected economic impact on the national health-care system (NHS) in Italy. **METHODS:** A decision model was developed in Excel and four revascularization strategies were compared (PTCA, BMS, SES, CABG) in a population of patients with new stenoses in native coronary arteries. Four subgroups of lesions were studied, either single-vessel (small vessel, long lesion, Benestent-like lesion) or multivessel. Diabetics were separately analyzed. Incremental cost per revascularization avoided and cost per event-free year gained were calculated at a 1 and 5-year time frame and 3% discount rate was applied to both costs and efficacy. Input data were from the published trials: BARI, BENESTENT I&II, ARTS, RAVEL. A survey of 3298 patients in 3 cathlabs captured the real-life casemix and current practice and allowed to customize the model. Italian NHS charges were used to estimate the financial impact. **RESULTS:** In the first year after revascularization, as compared with BMS, SES averted 123–182 revascularizations in 1000 patients and gained 0.6–1.9 event-free months per patient; SES also saved €1036–€1800 per patient: a larger gain was achieved in those with multivessel disease and in the 5-year horizon, provided that the SES efficacy was constant over time. In diabetics the SES averted 15% more revascularizations and increased savings by 12%. In single vessel disease the breakeven point of SES efficacy was 72% and that of charge for stenting with SES was €7242 (17% higher than baseline). Overall forecasted savings to the NHS would be €38.927.652 per year, if SES replaced all the stents. **CONCLUSIONS:** SES is cost saving in a DRG-based reimbursement NHS, however, the uptake of SES can be supported through substantial update of charges while keeping a net economic gain.

HS2

COST-EFFECTIVENESS OF LEUKODEPLETION IN MAJOR CARDIAC SURGERY

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OBJECTIVES: A recent study in cardiac surgery showed a decrease in infections and mortality in patients receiving leukocyte-depleted erythrocytes (LD) compared to buffy-coat depleted packed red blood cells (PC). However, cost-effectiveness data on leukoreduction of red blood cell concentrates is scarce. We estimated cost-effectiveness of LD over PC from a clinical trial involving valve and CABG surgery patients, from the hospital perspective. **METHODS:** From May 1999 to May 2001, in two university hospitals (Amsterdam and Leiden, Netherlands), 496 adult patients undergoing cardiac valve surgery (±CABG) were randomised double-blind into two groups (LD or PC). The rates of in-hospital mortality and mortality within 90 days after surgery were primary endpoints. Cost-effectiveness in net costs per life-year gained (LYG) was established using standard pharmaco-economic methods. **RESULTS:** In-hospital mortality was 10.1% and 5.5% for PC and LD respectively (OR 0.99–4.00; $p = 0.05$). Mortality in 90 days was 12.7% and 8.4% for PC and LD respectively (OR 0.84–2.73; $p = 0.16$). Average costs of ICU-care, standard care, antibiotics and blood product utilisation were €11,863.07 and €10,914.02 for PC and LD respectively. Relative to PC, LD yields an estimated 2.15 undiscounted LYG (0.70 y at 3%, 0.21 y at 5%). Ergo, net costs are lower for LD and health outcomes better. **CONCLUSIONS:** From this clinical trial involving cardiac surgery patients undergoing valve surgery with or without CABG, leukodepleting red blood cell concentrates appears to be a dominant strategy in this preliminary evaluation.